

Serial No.: 10/522,055

Office Action dated: February 22, 2007

Amendment dated: August 22, 2007

IN THE DRAWINGS:

Please replace previously filed FIG. 2 with the attached, substitute
FIG. 2. An annotated FIG. 2 is also enclosed.

REMARKS

Reconsideration of the present application and withdrawal of the rejection of claims 1-19 is respectfully requested. Applicant has attempted to address every objection and ground for rejection in the Office Action dated February 22, 2007, and believes the application is now in condition for allowance. Applicant has amended claims 1, 2, 3, 5, 6, 9, 10, 12, 13, 14, 15, 16 and 17 to more clearly describe the present method.

The Information Disclosure Statement ("IDS") filed in June 2005 is objected to under 37 C.F.R. § 1.98(a)(1) as having an improper format. Specifically, the Examiner states that foreign patent documents: EP 667115A1, WO 200150941A2, WO 200022975A1 and EP 1260176A2 were improperly cited on the IDS. Applicant has attached a copy of the IDS filed in June 2005 along with a copy of the Form 1449 and stamped, returned postcard that shows that the Patent Office received the IDS and Form 1449 on June 13, 2005. The attached Form 1449 properly cites the above foreign patent documents. Accordingly, Applicant respectfully requests that the objection of the IDS be withdrawn.

The drawings stand objected to under 37 C.F.R. § 1.83(a) because the Examiner states that the standard fastening means 2 is not shown in the drawings. Applicant has amended FIG. 2 to identify the fastening means 2. A replacement drawing sheet and annotated drawing sheet are enclosed with this

response. Applicant respectfully requests that the objection to the drawings be withdrawn.

The specification is objected to as not having the proper format. Specifically, the specification is lacking certain section headings. Applicant has amended the specification to insert the appropriate section headings and correct informalities. Applicant respectfully requests that the objection to the specification be withdrawn.

Claims 1-19 stand objected to because of informalities. Specifically, the Examiner identifies informalities in certain of the claims and provides suggestions for correcting those informalities. Applicant has amended the claims according to the Examiner's suggested amendments. Accordingly, Applicant respectfully requests that the objection to claims 1-19 as to the informalities be withdrawn.

Claims 1-19 stand rejected under 35 U.S.C. § 112, second paragraph, as being indefinite. Specifically, the Examiner states that the phrase "and/or" in claims 1 and 9 is indefinite. The Examiner also states that the phrases "on the one hand" and "on the other hand" in claim 9 are indefinite. Applicant has amended claims 1 and 9 to clarify the claims and remove the indefinite terms. Accordingly, Applicant respectfully requests that the rejection of claims 1-19 under § 112 be withdrawn.

Claims 1-5, 9-10, 14, 16 and 17 stand rejected under 35 U.S.C. § 103(a) as being unpatentable over U.S. Patent No. 6,904,308 to Frisch et al. (“Frisch”) in view of U.S. Publication No. 2004/0015075 to Kimchy et al. (“Kimchy”). Applicant respectfully submits that the combination of Frisch and Kimchy does not disclose or suggest the features of amended claims 1 and 9.

Frisch discloses a system and method for locating an in vivo signal source which utilizes an ingestible capsule 100 and an antenna array belt 10 to estimate a position of the capsule inside a subject's body based on the signal strength. (Col. 3, lines 10-22 and 60-65; FIGs. 1A, 2 and 3). As recognized by the Examiner, Frisch fails to disclose or suggest “measuring the phase shift of the frequency transmitted by said transmission means relative to a reference phase, and determining by triangulation on the basis of the three phase-shift measurements the position of said element.” (See the Office Action, page 13)

Kimchy discloses a radioactive emission detector equipped with a position tracking system for medical procedures. Kimchy's system calculates a position of a radioactive emitting source in a subject's body. Specifically, a radioactive emission detector 22 is positioned outside of the subject's body and helps to track the position of the radioactive emitting source in the body. A position tracking system 24 is connected to the detector 22 to monitor the position of the detector 22 in a two or three-dimensional space. (See Paragraph [0112]).

Applicant submits that a person of ordinary skill in the art would not be motivated to combine Frisch and Kimchy to achieve the claimed invention where there is no teaching or suggestion in these references to make such a combination. As stated above, Frisch discloses a system and method for determining the location of an ingested capsule 100 in a subject's body using signal frequencies.

In contrast, Kimchy discloses a system for determining the position of a radioactive emitting source based on the detection of radioactivity and not signal frequencies. Also, Frisch detects the location of the capsule based on the signal frequencies emitted from the capsule. Kimchy determines the location of a radioactive emission source based on the position of the detector 22 outside of the body. Further, Frisch discloses a system in which the signal emitter (i.e., the capsule) is not connected to the signal detectors (i.e., the antennas) whereas the detector 22 in Kimchy is connected to the position tracking system to detect the position of the detector. Accordingly, Applicant submits that a person of ordinary skill in the art would not be motivated to combine Frisch and Kimchy to achieve the claimed invention.

Nevertheless, the combination of Frisch and Kimchy does not disclose or suggest the subject matter of amended claims 1 and 9. Amended claim 1, recites among other things, "measuring . . . the phase shift of the frequency transmitted by said transmission means relative to a reference phase,"

“determining, by triangulation on the basis of the three phase-shift measurements, a 3D [three dimensional] position of said transmitting element” and “defining, according to the 3D position of said transmitting element, a data for an assessment of the digestive motility and transit.” Neither Frisch nor Kimchy disclose or suggest such subject matter.

Frisch discloses that the capsule 100 may contain several sensors such as temperature, PH and optical sensors. (Col. 3, lines 60-67). Frisch also discloses determining the location of the capsule based on the estimated distance of the capsule from each of the antennas. (Col. 4, lines 10-20). Frisch does not disclose or suggest determining a 3D position of the capsule to assess digestive motility using triangulation on the basis of three phase-shift measurements.

Kimchy does not remedy the deficiencies of Frisch. Kimchy discloses a system in which a radioactive emission detector detects the position of a radioactive source in a body by tracking the position of the detector itself. Kimchy does not disclose or suggest “determining, by triangulation on the basis of the three phase-shift measurements, a 3D position of said transmitting element” and “defining, according to the 3D position of said transmitting element a data for an assessment of the digestive motility” as in the claimed invention.

Accordingly, Applicant submits that amended claim 1 and the claims that depend therefrom, are each patentably distinct over the combination of Frisch and Kimchy and in condition for allowance.

Amended claim 9 includes similar subject matter to amended claim

1. Specifically, amended claim 9 recites, among other things, “receiving means comprising at least three receivers intended to be placed around the trunk of said subject, each receiver being able to measure at a given time the phase shift of said transmission frequency relative to a reference phase” and “means for processing and analyzing the three phase-shift measurements made by said at least three receivers which are able to determine, by triangulation, a 3D position of said transmitting element.” As stated above, the combination of Frisch and Kimchy does not disclose or suggest determining a 3D position of a transmitting element in a subject’s body by processing and analyzing three phase-shift measurements made by three receivers.

Accordingly, Applicant submits that amended claim 9 and the claims that depend therefrom, are each patentably distinct over the combination of Frisch and Kimchy and in condition for allowance.

Claims 12, 13 and 15 stand rejected under 35 U.S.C. § 103(a) as being unpatentable over Frisch, Kimchy and in further view of WO 01/5094 to Refael (“Refael”). Claims 12, 13 and 15 depend from amended claim 9. Applicant therefore submits that claims 12, 13 and 15 are patentably distinct from the combination of Frisch, Kimchy and Refael for at least the reasons provided above with respect to amended claim 9. Furthermore, Refael does not disclose or suggest “determining, by triangulation on the basis of the three phase-shift

measurements, a 3D position of said transmitting element” and “defining, according to the 3D position of said transmitting element, a data for an assessment of the digestive motility and transit” in a person’s body. Accordingly, Applicant submits that claims 12, 13 and 15 are patentably distinct over the combination of Frisch, Kimchy and Refael and in condition for allowance.

Claims 7 and 18 stand rejected under 35 U.S.C. § 103(a) as being unpatentable over Frisch, Kimchy and in further view of U.S. Patent No. 5,415,181 to Hogrefe et al. (“Hogrefe”). Claim 7 depends from amended claim 1 and claim 18 depends from amended claim 9. Applicant therefore submits that claims 7 and 18 are patentably distinct over the combination of Frisch, Kimchy and Hogrefe for at least the reasons provided above with respect to amended claims 1 and 9. Furthermore, Hogrefe discloses a biomedical monitoring system using AM and FM signal transmission. Hogrefe does not disclose or suggest “determining, by triangulation on the basis of the three phase-shift measurements, a 3D position of said transmitting element” and “defining, according to the 3D position of said transmitting element, a data for an assessment of the digestive motility and transit” in a person’s body as presently claimed. Accordingly, Applicant submits that claims 7 and 18 are patentably distinct from the combination of Frisch, Kimchy and Hogrefe and in condition for allowance.

Claims 8 and 19 stand rejected under 35 U.S.C. § 103(a) as being unpatentable over Frisch, Kimchy and in further view of WO 00/22975 to Iddan et

al. ("Iddan I"). Claim 8 depends from amended claim 1 and claim 19 depends from amended claim 9. Therefore, Applicant submits that claims 8 and 19 are patentably distinct from the combination of Frisch, Kimchy and Iddan I for at least the reasons provided above with respect to amended claims 1 and 9. Furthermore, Iddan I discloses a method for delivering a device to a target location in a gastrointestinal track using a camera system. Iddan I does not disclose or suggest "determining, by triangulation on the basis of the three phase-shift measurements, a 3D position of said transmitting element" and "defining, according to the 3D position of said transmitting element, a data for an assessment of the digestive motility and transit." Accordingly, Applicant submits that claims 8 and 19 are patentably distinct over the combination of Frisch, Kimchy and Iddan I and in condition for allowance.

Claims 6 and 11 stand rejected under 35 U.S.C. § 103(a) as being unpatentable over Frisch, Kimchy and in further view of European Patent No. 0667115 to Iddan et al. ("Iddan II"). Claim 6 depends from amended claim 1 and claim 11 depends from amended claim 9. Therefore, Applicant submits that claims 6 and 11 are patentably distinct over the combination of Frisch, Kimchy and Iddan II for at least the reasons provided above with respect to amended claims 1 and 9. Furthermore, Iddan II discloses an in vivo video camera system. Iddan II does not disclose or suggest "determining, by triangulation on the basis of the three phase-shift measurements, a 3D position of said transmitting element"

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and “defining, according to the 3D position of said transmitting element, a data for an assessment of the digestive motility and transit.” Accordingly, Applicant submits that claims 6 and 11 are patentably distinct over the combination of Frisch, Kimchy and Iddan II and in condition for allowance.

In view of the above amendments, the application is respectfully submitted to be in allowable form. Allowance of the rejected claims is respectfully requested. Should the Examiner discover there are remaining issues which may be resolved by a telephone interview, the Examiner is invited to contact Applicant’s undersigned attorney at the telephone number listed below.

Respectfully submitted,

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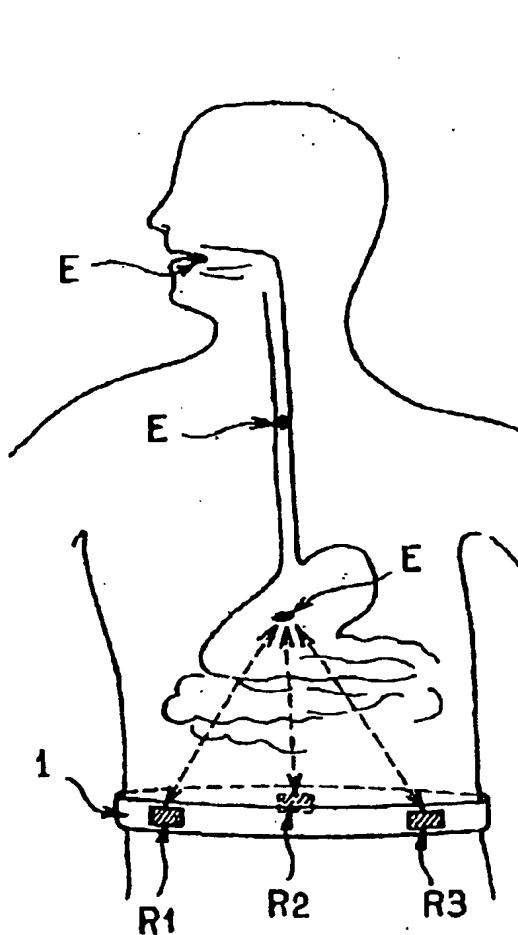


FIG. 1

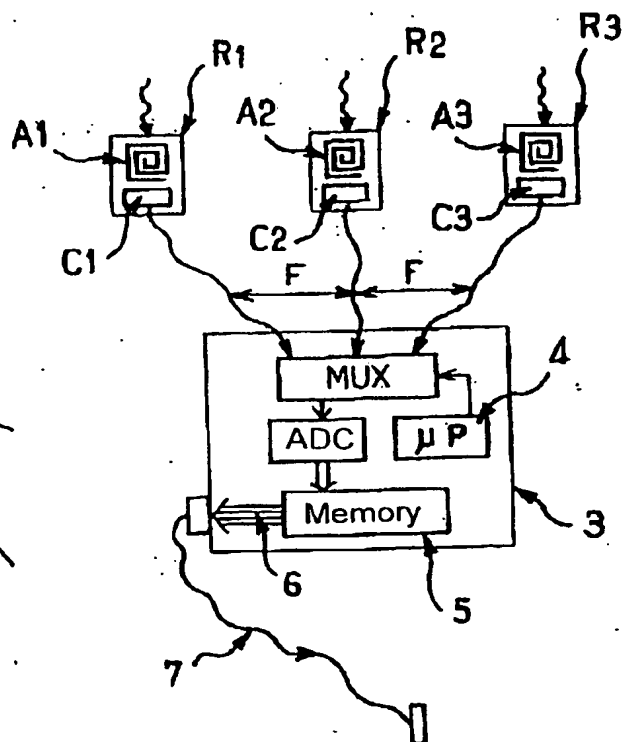


FIG. 3

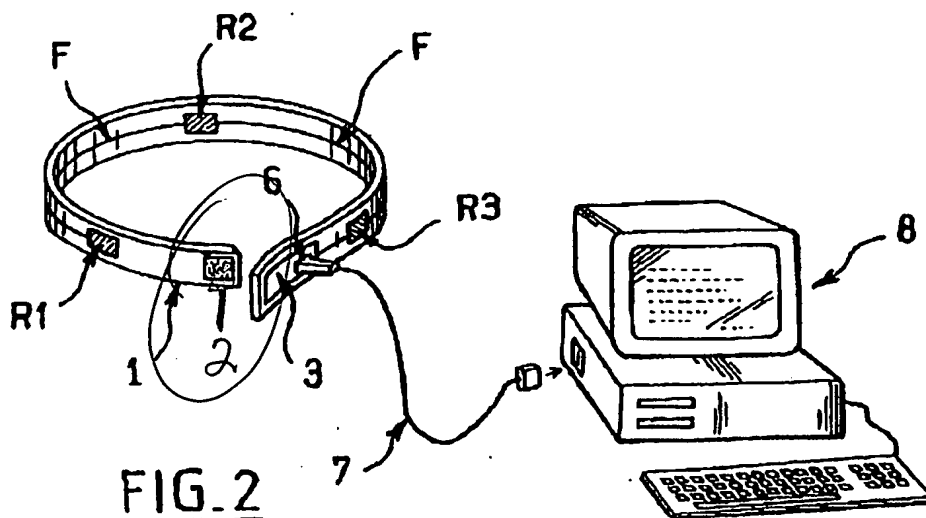


FIG. 2